Part 1: Natural Resources

4.1.1. Public Water Supply Sources

Inventory

Murray County is served by three water utilities: Chatsworth Water Works Commission, Dalton Utilities, and Ocoee Water Works. The services areas for these utilities are shown in Figure 4-A.

The Chatsworth Water Works Commission is the primary provider of water in Murray County and is the only utility with permitted withdrawals in the County. The total permitted withdrawal for the water works is 5.574 MGD. The sources and permitted withdrawals (monthly average) for each source are listed to the right.

Murray County Public Water Sources and Permitted Withdrawals

Carters Lake – 2.002 MGD Eton Spring – 1.8 MGD O'Neil/Sumach Spring – 1.764 MGD Nix Spring – 0.008 MGD Holly Creek – none, not operational

Resource Vulnerability

The US Environmental Protection Agency requires that all states perform source water assessments for each drinking water intake and develop a comprehensive Source Water Assessment Program (SWAP).

The assessments identify potential pollution sources, analyze the risk to public health, and provide data and analyses for the creation of Source Water Protection Plans (SWPPs).

The Georgia Environmental Protection Division (EPD) contracted with the NGRDC to perform source water assessments on two water intakes in Murray County: Carters Lake and Holly Creek. The NGRDC used the EPD's methodology for classifying their susceptibility to potential contaminants. Determining the "release potential" and the "risk potential" from inventoried sources within the watershed established the susceptibility of a drinking water intake to pollution. (See definitions to the right.)

The Carters Lake intake was found to have a medium overall susceptibility rating. This rating is not an indication of current water quality, but is information that can be used to determine the possibility of pollution contamination. The Holly Creek

Definitions

"Release Potential," as outlined in the EPD's SWAP guidance, is the potential for a contaminant to reach source water and eventually the surface water intake. Release potential factors include distance to surface water, volume of release, duration of release, and ease of travel.

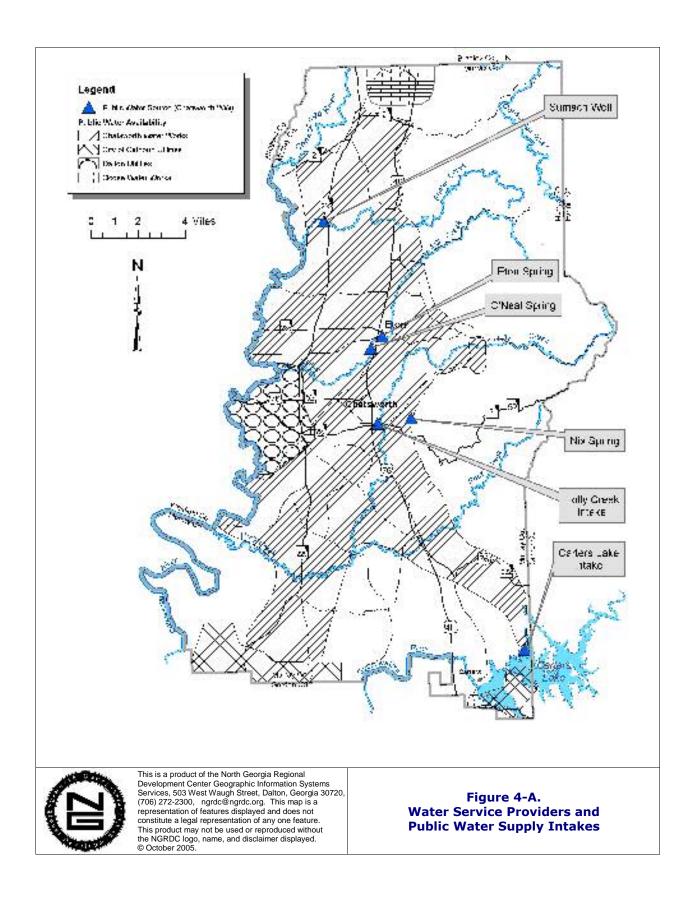
"Risk Potential" involves assessing the level of harm that would result should contamination occur. Risk potential factors include distance to surface water supply and toxicity.

intake was found to have a high overall susceptibility rating because of the number and types of potential pollution sources in high priority categories. Source water assessments have not been conducted for Eton, O'Neal, or Nix Spring.

Details on the ratings of the intakes in Murray County can be found in the *Northwest Georgia Water Supply Watershed Based Regional Source Water Assessment, Milestone 4, Susceptibility Analysis*, prepared by the Coosa Valley RDC and the North Georgia RDC.

Protection Measures

See "Section 4.1.2. Water Supply Watersheds" in this appendix and "Section 5.1.2. Water Supply and Treatment" in Element 5 for more information.



4.1.2. Water Supply Watersheds

Inventory

There are a number of water supply watersheds within Murray County. Their boundaries are shown in Figure 4-B on the following page.

The Georgia Department of Natural Resources (DNR) classifies watersheds by size and whether or not they include a reservoir. The watershed above the Holly Creek intake is classified as small (<100 square miles). The other watersheds are classified as large (>100 square miles). The

watersheds above the Coosawattee/Carters Lake intake includes a reservoir.

Definition

Water supply watersheds are defined by the Georgia Department of Natural Resources as areas of land upstream of governmentally owned public drinking water intakes or water supply reservoirs.

Resource Vulnerability

Land development within water supply watersheds may affect the quantity and quality of raw water which flows into reservoirs or public water intakes. The potential problems in water supply watersheds include (1) point and non-point sources of pollution and (2) increases

in impervious surfaces from development such as buildings, roads, and parking lots.

Point sources of pollution include municipal sewage discharges, industrial waste water, septic tanks, accidental spills of hazardous material, and leachates from landfills or chemical waste dumps. Non-point source pollution consists of contaminates which are generated over large areas such as run-off from cropland, managed forests, paved surfaces, and construction activities. Removing vegetation from stream channels and paving over the soil increases the volume and rate of surface runoff which, in turn, increases the potential for erosion, flooding, and sedimentation (pollution) of the stream.

Potential Protection Measures

Watershed Protection Criteria. To protect drinking water supplies, the Georgia Department of Natural Resources (DNR) has established buffer requirements and impervious surface limitations to be applied to watersheds which are smaller than 100 square miles and to water supply reservoirs. These requirements are shown in Table 4-A to the right. (Note: Because watersheds are not identical, alternate criteria may be adopted by local governments to protect water supply watersheds.)

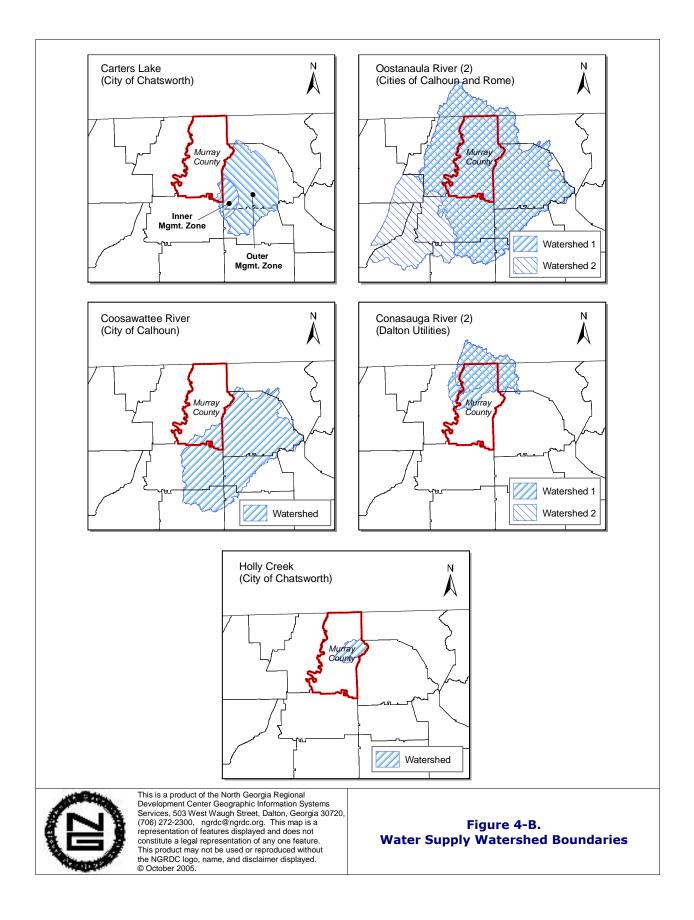
Table 4-A.
Watershed Protection Criteria

Watershea Frotection Criteria								
	atershed q. miles)	Large Watershed (>100 sq. miles)						
(< 100 5	q. miles)	(>100 5	q. IIIIIes <i>)</i>					
reservoir	no reservoir	reservoir	no reservoir					
Reservoir Buffer								
150'	n/a	150'	n/a					
Perennial Stream Buffer (1 st row: within a 7 mile radius upstream of a government owned public water intake or reservoir, 2 nd row: outside 7 mile radius)								
100'	100'	100'	None					
50'	50'	None None						
Perennial Stream Setback (1st row: within a 7 mile radius upstream of a government owned public water intake or reservoir, 2nd row: outside 7 mile radius)								
150'	150'	150'	None					
75'	75'	None None						
Watershed Impervious Surface								
25% or less	25% or less	None	None					

Source: Criteria for Water Supply Watersheds; www.dca.state.ga.us/planning/ocp_rules/env1.html

Utilities, forestry, and agriculture are exempt from protection criteria, provided they meet stipulated conditions, including not impairing drinking water stream quality. Pre-existing uses and mining permitted by DNR are allowed. New facilities handling hazardous waste must perform operations on impervious surfaces and in conformance with federal and Standard Fire Prevention Code regulations.

None of the local governments have adopted the Watershed Protection Criteria described above.



Section 303(d) Lists. Section 303(d) of the Federal Clean Water Act requires that Georgia periodically prepare a list of all surface waters in the state for which beneficial uses of the water (e.g. drinking, recreation, aquatic habitat, and industrial use) are impaired by pollutants. Table 4-B below provides a list of the water bodies in Murray County which have been designated in Georgia's 2004 (draft) Section 303(d) list as either partially supporting or not supporting designated water uses. Figure 4-C shows the location of the streams.

Table 4-B. Section 303(d) List of Impaired Streams in Murray County (DNR 2004 DRAFT)

Name [Length in Miles]	Location	Support Not Sup	ially ing (PS), oporting or N/A 2004	Water Use Classification (2004)	Criterion Violated (2004)	Evaluated Causes/ Potential Causes (2004)
Conasauga River [20]	from State line to US 286 (Murray/Whitfield Counties)	N/A	PS	Fishing/ Drinking Water	Fecal Coliform Bacteria, Fish Consumption Guidance	Nonpoint Sources/ Unknown Sources
Conasauga River [18]	from US 286 to Holly Creek (Whitfield/Murray Counties)	PS	NS	Fishing/ Drinking Water	Fecal Coliform Bacteria, Fish Consumption Guidance	Nonpoint Sources/ Unknown Sources
Conasauga River [24]	from Holly Creek to Oostanaula River (Murray/Gordon Counties)	NS	NS	Fishing	Fecal Coliform Bacteria, Fish Consumption Guidance	Municipal Facility, Urban Runoff
Holly Creek [4]	downstream from Chatsworth WPCP	N/A	NS	Fishing	Fecal Coliform Bacteria	Urban Runoff
Holly Creek [8]	from Rock Creek to Conasauga River	PS	NS	Fishing	Fecal Coliform Bacteria	Nonpoint Sources/ Unknown Sources
Mill Creek Tributary [3]	from headwaters to Mill Creek	N/A	PS	Fishing	Biota Impacted ¹	Nonpoint Sources/ Unknown Sources
Noblet Creek [5]	from headwaters to Coosawattee River (Murray/Gordon Counties)	N/A	PS	Fishing	Biota Impacted ¹	Nonpoint Sources/ Unknown Sources
Polecat Creek [10]	from headwaters to Conasauga River (Murray/Gordon Counties)	N/A	PS	Fishing	Biota Impacted ¹	Nonpoint Sources/ Unknown Sources

Source: www.dnr.state.ga.us/dnr/environ

Waters placed on the 303(d) list require the preparation of Total Maximum Daily Loads (TMDLs). The definition of TMDL is found to the right.

After TMDLs are established for a water body, a TMDL implementation plan is developed and then put into effect. An implementation plan details the types of pollution control measures needed to remediate the impaired water body. Once fully implemented, the plan should result in the previously impaired water achieving a "fully supporting" status.

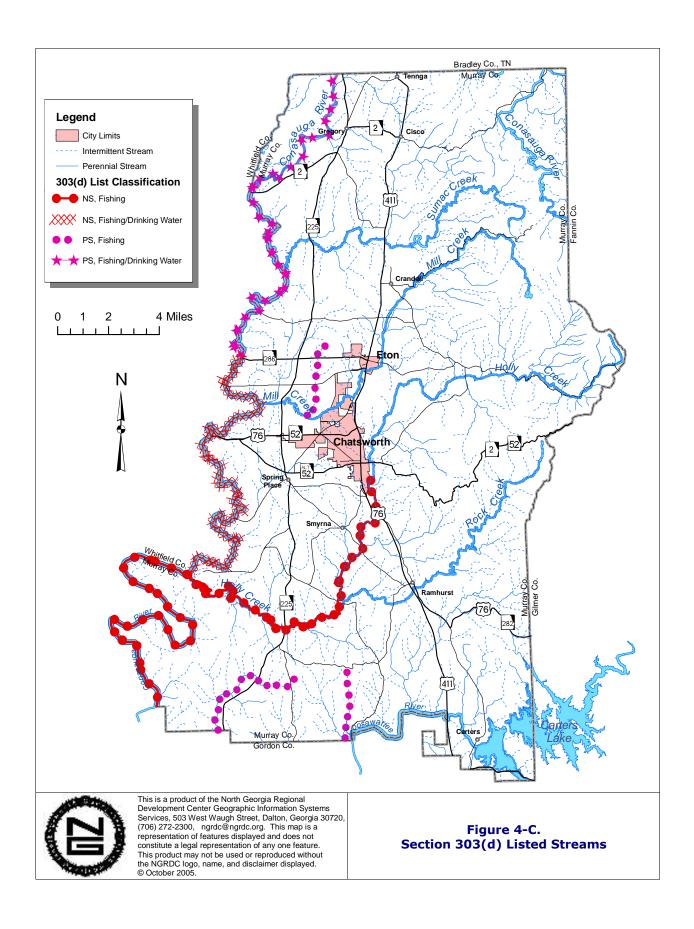
TMDLs have either been completed or are currently being developed for each of the water bodies listed in Table 4-B above.

What is a TMDL?

"A TMDL is a calculation of the maximum amount of a pollutant that a river, stream, or lake can receive and still be safe and healthy. It is essentially a prescription designed to restore the health of a polluted water body by indicating the amount of pollutants that may be present in the water and still meet water quality standards."

Source: Georgia EPD, "Watershed Wisdom"

¹ "Biota Impacted" means there has been an impact upon the fish community in the creek.



4.1.3. Groundwater Recharge Areas

Inventory

The Georgia Department of Natural Resources maps recharge areas and describes them based upon outcrop area, lithology, soil type and thickness, slope, density of lithologic contacts, geologic structure, the presence of karst, and potentiometric surfaces.

Significant recharge areas exist in Murray County. The locations are illustrated in Figure 4-D.

Resource Vulnerability

Recharge areas are vulnerable to urban development activities and agricultural activities, both of which contribute to

a deterioration in groundwater quality and can threaten the health of residents relying on well water. Development usually means an increase in the amount of land covered with impervious surfaces. Paving land in recharge areas can alter or impair their recharge characteristics, thereby decreasing groundwater supplies.

Protection Measures

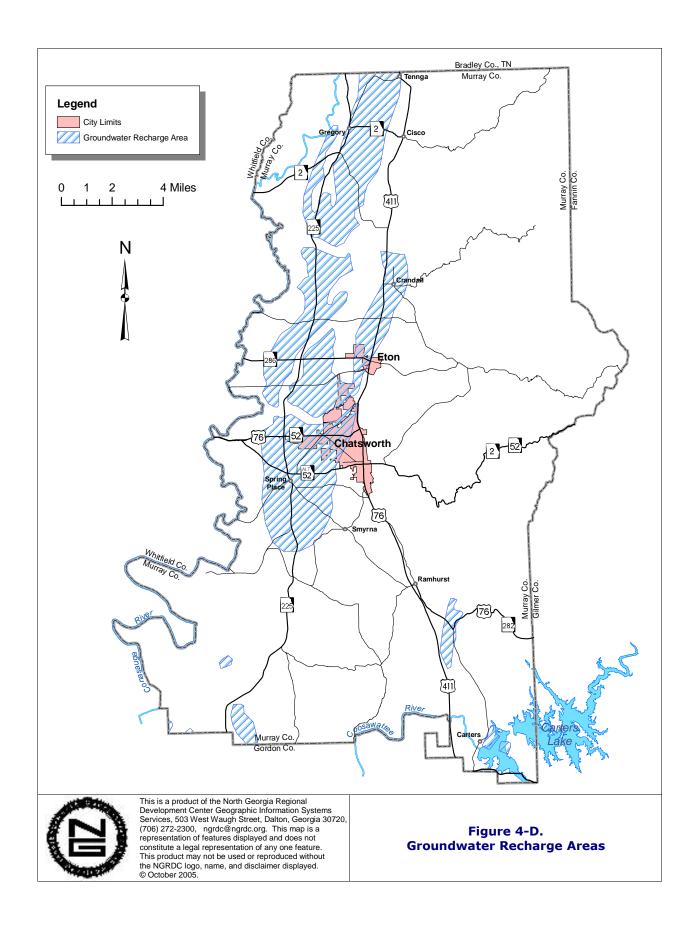
Aquifer recharge areas are often overlain by relatively flat areas of thick soils. This makes such areas very attractive for commercial and industrial development. For this reason, DNR has established standards to be considered by local governments for use in the protection of recharge areas. The City of Eton has incorporated these standards into their zoning regulations.

The following criteria are to be considered for the protection of groundwater recharge areas.

- 1. New hazardous waste facilities are to be prohibited.
- 2. Sanitary landfills are required to have synthetic liners and leachate collection systems.
- 3. Industrial facilities which handle, treat, or store toxic materials are required to perform such operations on an impermeable pad having a spill and leak collection system.
- 4. Above ground chemical or petroleum storage tanks with a minimum volume of 660 gallons, require secondary containment.
- 5. Agricultural waste sites over a certain size must be lined.
- 6. Permanent stormwater infiltration basins may not be constructed in areas of high pollution susceptibility.
- 7. In areas which must employ septic tanks, subdivision requirements must be modified to require larger lot sizes.

Definition

A groundwater recharge area is a surface land area where precipitation infiltrates the soil and percolates downward to replenish an aquifer or underground reservoir. The contaminants in the soil and air affect the overall quality of the water that reaches an aquifer. While vegetation biologically cleans the water as it infiltrates the soil, some contaminants are still conveyed to the groundwater. Once polluted, a groundwater source is nearly impossible to clean up.



4.1.4. Wetlands

Inventory

Murray County contains approximately 2,580 acres of isolated wetlands as illustrated in Figure 4-E.

Resource Vulnerability

Under natural conditions, wetlands help maintain and enhance water quality by filtering out sediments and associated non-point source pollutants from adjacent land uses. They also store water, thereby stabilizing dry weather stream flows and reducing flood hazards. In addition, wetlands serve as fish, wildlife, and plant habitats.

Definition

The US Army Corps of Engineers (COE) defines freshwater wetlands are as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

Generally, wetlands include swamps, marshes, bogs, and similar areas.

Protection Measures

In an effort to protect and manage the nation's freshwater wetlands, the EPA and the COE have adopted the Section 404K program of the Clean Water Act. The EPA and COE share the primary responsibility for enforcement. The Georgia DNR adopted the Section 404 program standards into their Environmental Planning Standards.

The City of Eton has implemented these standards through zoning. A Wetlands Protection District has been designated which correspond to all lands within Eton that are mapped as wetlands by the US Fish and Wildlife Service on their National Wetland Inventory (NWI) maps. If an area proposed for development is located within 50 feet of the Wetlands Protection District boundary, a COE determination is required. If the COE determines that wetlands are present, a local development permit will not be granted until a Section 404 Permit or Letter of Permission is issued.

Certain uses are generally allowed by right within the Wetlands Protection District provided they do not require structures, grading, fill, draining, or dredging. These include the following:

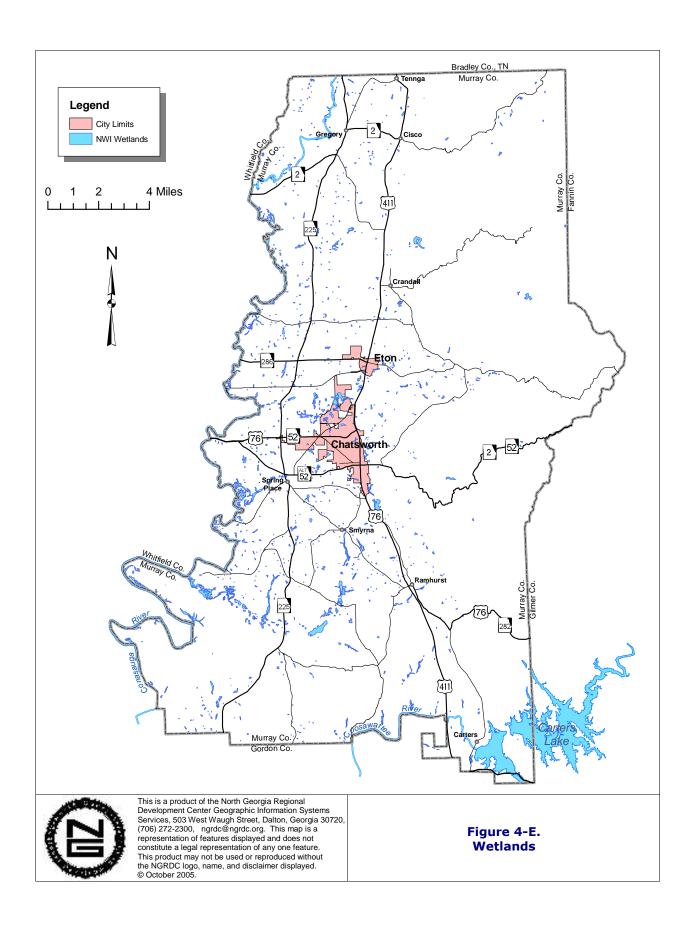
- 3 soil, water, vegetation, fish, and wildlife conservation;
- ③ passive recreation activities;
- ③ forestry in accordance with best management practices (BMPs);
- ③ cultivation of agricultural crops and pasturing of livestock, subject to BMPs; and
- 3 education, scientific research, and nature trails.

Hazardous or sanitary waste landfills and receiving areas for toxic or hazardous waste are prohibited in the Wetlands Protection District.

Wetlands Maps

The Department of Natural Resources has made satellite photography of wetlands and forest land available to the public. These maps are not accurate at the site level, but do provide valuable information which could be used to alert building inspectors and other local enforcement personnel when development appears to be occurring in violation of 404 permitting regulations.

Murray County and the City of Chatsworth have not yet adopted the State's recommended Environmental Planning Standards for wetlands. The Georgia Department of Community Affairs has asked local governments throughout the state who have not adopted these measures to temporarily postpone adoption to allow for further investigation.



4.1.5. Protected Rivers

Inventory

The Conasauga River and the Coosawattee River meet the criteria for river protection. (See Figure 4-F.) The Department of Natural Resources has deemed rivers of this size to be of vital importance to Georgia in that they help serve as habitat for wildlife, a site for recreation, and a source for clean drinking water. River corridors also allow the free movement of wildlife from area to area within the state, help control erosion and river sedimentation, and help absorb flood waters.

Definition

A protected river is defined under the Rules for Environmental Planning Criteria as any perennial river or water course with an average annual flow of at least 400 cubic feet per second.

The Conasauga River originates in the Cohutta Mountains in Fannin County. The river flows north-northwest into Tennessee before turning south and flowing back in to the flat valley of the Coosa Valley basin. It forms the boundary between Whitfield and Murray County and ends where it merges with the Coosawattee River to form the Oostanaula River in south Whitfield County. The principal tributaries of the Conasauga River are Coahulla Creek and its feeder stream, Mill Creek.

The Coosawattee River stars from the confluence of the Ellijay and Cartecay Rivers in Gilmer County. It is the primary tributary to Carter's Lake, a major recreation area and public water source for Murray County and other adjacent counties.

Resource Vulnerability

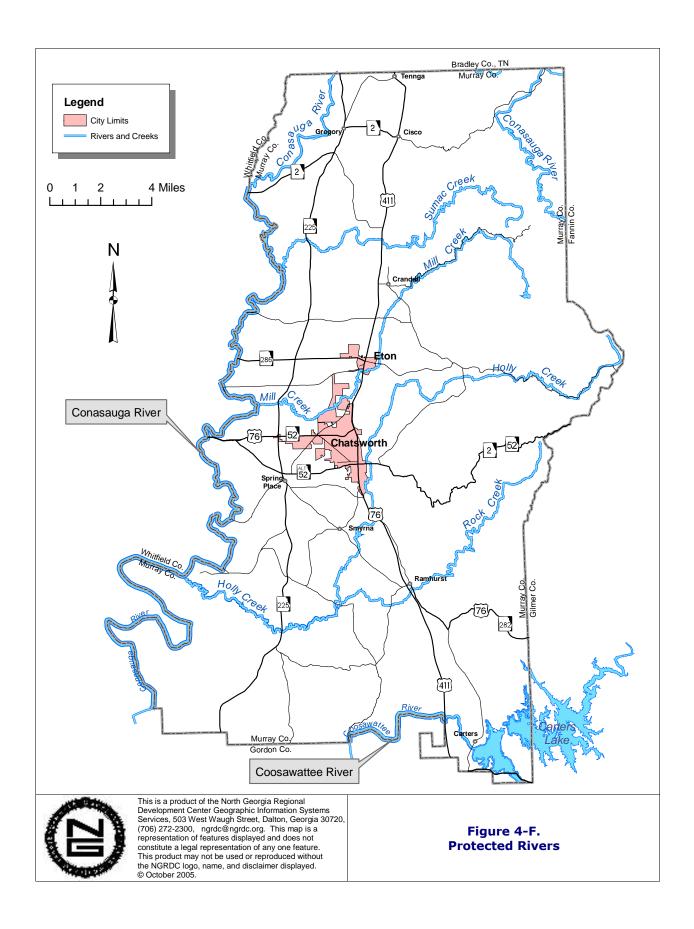
The environmental quality of both the Conasauga and Coosawattee River corridors is vulnerable to unregulated development and other intensive uses of the adjacent land. Development and forestry activities in the immediate vicinity of the river increase storm water runoff that can contain sediment and other contaminating pollutants which can destroy water quality and plant and animal habitat. Development along stream banks can infringe on the recreational aspects of the river corridor by limiting access to the river by the public. Such development will also remove vegetation and destroy the scenic and aesthetic attributes of the river corridor that add to the quality of life in the county.



The Conasauga River

Protection Measures

Existing Regulations. Murray County is currently certified by the Environmental Protection Division (EPD) of DNR to enforce the State Soil Erosion and Sedimentation Act, which requires sediment control measures during construction activities. Because exemptions exist for timber harvesting, agriculture, single family residential construction by individual lot owners, there do not appear to be sufficient safeguards for riverfront development. Furthermore, the erosion and sedimentation requirements do not limit the type or density of uses. As a result, these regulations have little long-term benefit toward minimizing or preventing the effects of non-point source pollution that are caused by development.



The County's Flood Damage Prevention Ordinance likewise does not limit the type or density of development occurring in the river corridor except for that area that falls within the floodway (the width of the river where the volume and velocity of flood conditions is the greatest). The regulations simply require that any development occurring in the floodplain be elevated above the 100 year flood level.

Therefore, the flood regulations do not provide adequate protection against the potential adverse affects of development.

River Corridor Protection Minimum Standards. The Department of Natural Resources has drafted measures for consideration by local governments to protect river corridors. The measures include the establishment of a 100 foot vegetation buffer area measured horizontally from each river bank. No development or other land disturbing activity would be allowed to occur within a 100 foot buffer except for those items listed in the box to the right.

Local governments may also allow the following uses within the protected river corridor:

- 3 all land uses existing prior to the adoption of local protection ordinances;
- 3 mining activities, if permitted by the Georgia Department of Natural Resources:
- 3 utilities that cannot be feasibly located outside the buffer area; and.
- 3 specific agricultural and forestry activities not covered by the provisions above.

Whenever any of the above permitted development does occur, the natural vegetative buffer must be restored as quickly as possible. Uses specifically prohibited in the river corridor by state mandate include handling areas for receiving and storing hazardous wastes, solid waste landfills, and any other uses specifically unapproved by local governments.

Murray County has not yet adopted these measures and the Department of Community Affairs has asked local governments to temporarily postpone adoption of these measures. The standards are not applicable to the Cities of Chatsworth and Eton as no protected rivers exist within their limits.

Uses Permitted in a River Corridor Protection District

- Single family dwellings, provided each dwelling is located on at least two acres and the septic tank drainfield is located outside of the 100 foot buffer area
- Any industrial or commercial uses
 existing prior to the adoption of local
 protection ordinances, provided they
 do not impair the drinking quality of
 water and meet all other federal
 environmental regulations.
- Road and utility crossings, provided the construction of these crossings meet the requirements of the Erosion and Sedimentation Act.
- Timber production and harvesting, provided it is consistent with the Best Management Practices established by the Georgia Forestry Commission, and does not impair the drinking quality of the water.
- Agricultural production, provided it is consistent with the best management practices established by the Georgia Soil and Water Conservation Commission, and all other state and federal regulations, and does not impair the drinking quality of the water.
- 6. Wildlife and fisheries management activities.
- 7. Natural water quality treatment or purification.
- Wastewater treatment.
- Recreational usage consistent with the maintenance of a natural vegetative buffer or with river dependent recreation.

4.1.6. Coastal Resources

Murray County is landlocked and consequently has no coastal resources.

4.1.7. Flood Plains

Inventory

The 100-year flood zones in Murray County, Chatsworth, and Eton are identified in Figures 4-G and 4-H.

Resource Vulnerability

Floodplains in their natural or relatively undisturbed state are important water resource areas. They serve three major purposes: natural water storage and conveyance, water quality maintenance, and ground water recharge. Unsuitable development can destroy their value. For example, any materials in the floodplain eliminate essential water storage capacity, causing water elevation to rise and resulting in the flooding of previously dry land.

Protection Measures

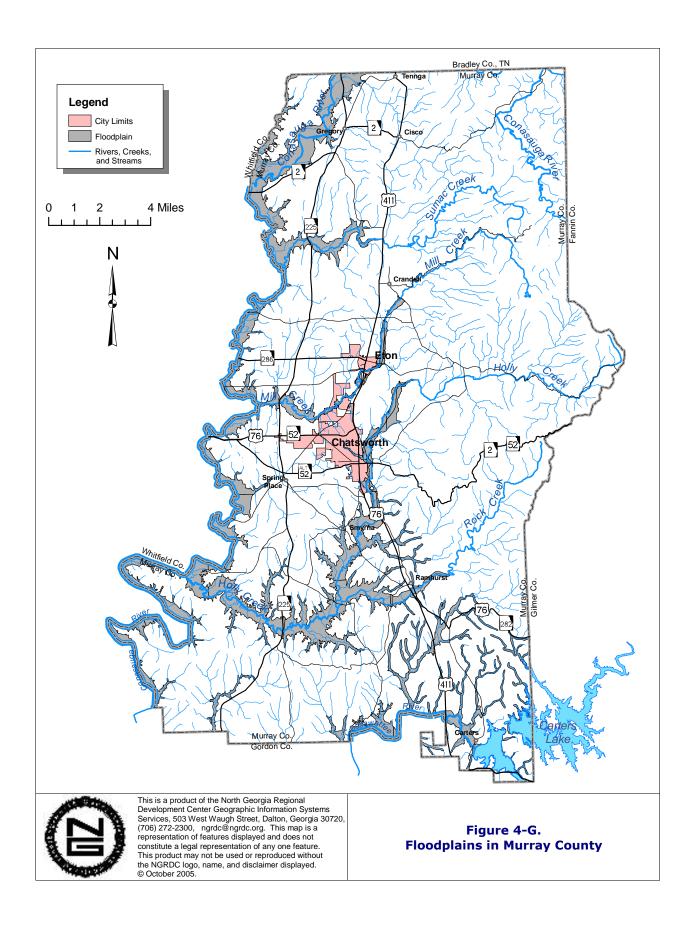
Murray County, Chatsworth, and Eton participate in the National Flood Insurance Program (NFIP), which is a federal program that allows property owners within communities that

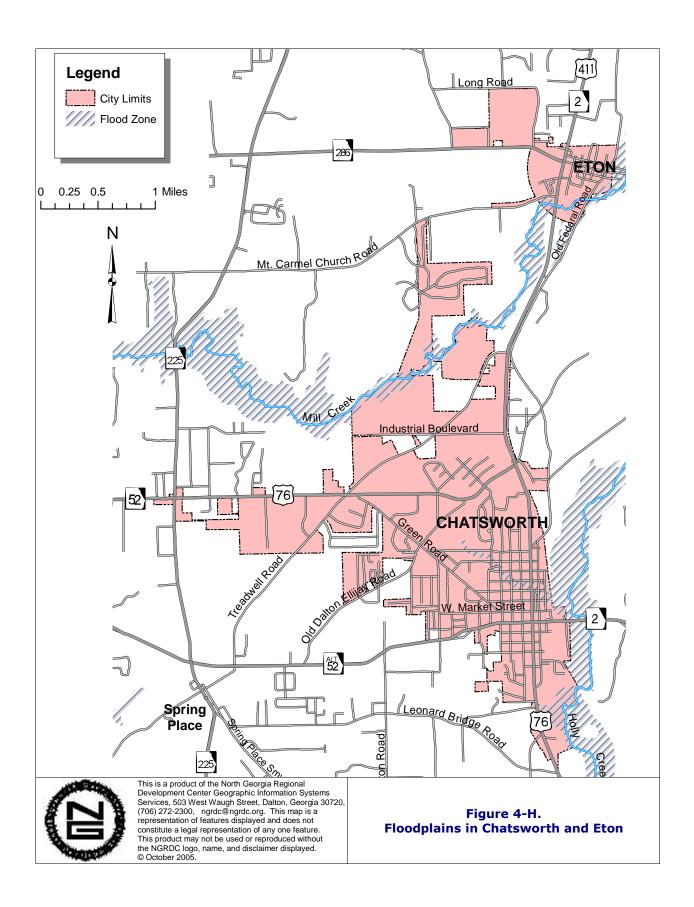
Definition

Flooding is the temporary covering of soil with water from overflowing streams and by runoff from adjacent slopes. Water standing for short periods after rainfall is not considered flooding, nor is water in swamps. Flooding is rated in terms which describe the frequency and duration of floods and the time of year when flooding is most likely to occur.

In compliance with requirements under the National Flood Insurance Program (NFIP), the Federal Emergency Management Agency (FEMA) has identified and mapped areas which are prone to flooding. The 100-year flood level is the national standard on which the floodplain management and insurance requirements of the NFIP are based.

participate in the program to purchase federally backed flood insurance. To implement the requirements of the program, provisions for flood control have been incorporated into subdivision regulations. Areas which are prone to flooding should not be planned for intensive land development.





4.1.8. Geology and Soil Types

Inventory

Geology. Murray County consists of approximately 347 square miles located in three physiographic provinces: the Great Valley District of the Ridge and Valley Province, the Cohutta Mountains District of the Blue Ridge Province, and the Cherokee Upland District of the Piedmont Province. The area of the county within the Ridge and Valley Province is generally underlain with sedimentary rocks consisting of limestone, shale, and sandstone. The portion of the county within the Blue Ridge Province is underlain with acid crystallic and metamorphic rocks consisting of slate, quartzite, schist, and conglomerate. The extreme southeastern portion of the county in the Piedmont Province consists of shale and sandstone formations leading to very hard lime rock foundations near the Gordon County line.

Soils. Various properties of soils are important in determining how land can be used safely and economically. Slope conditions affect lot size and density of development, and in some instances, may prevent certain types of development due to unavailability of sewer and other public

Ridge and Valley Province (Great Valley District)

Ridge and Valley Province (Great Valley District)

Pledmont Province (Cherokee Upand District)

Murray County is located in three physiographic provinces.

services. Soil erosion is particularly problematic in certain areas of Murray County which offer a combination of both shallow soils and steep terrain. Knowledge of these conditions is helpful in the preparation of land use plans, zoning, and subdivision standards.

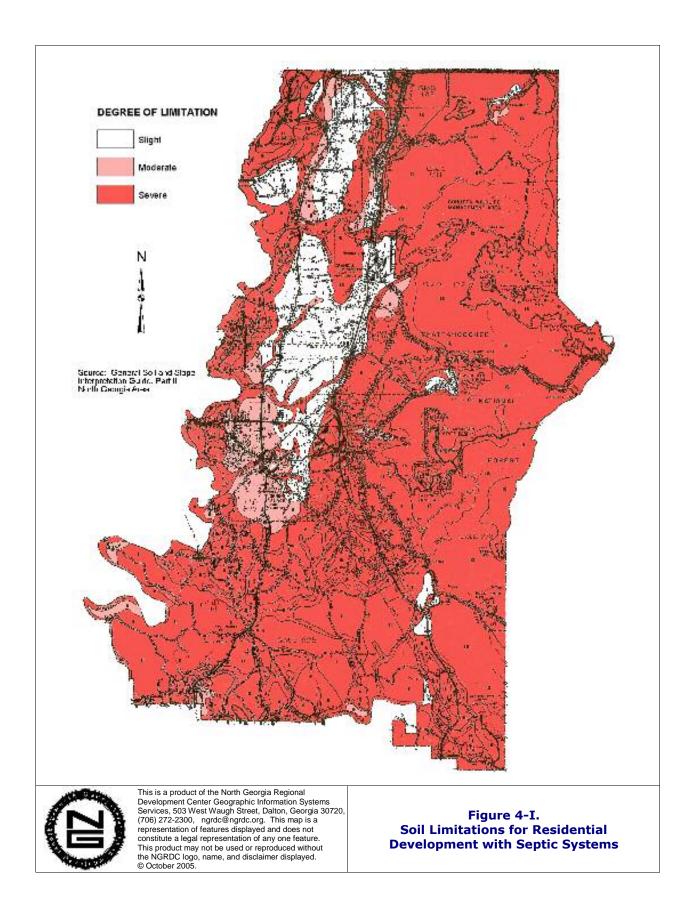
The relative suitability of soils for select land uses is based upon a variety of site characteristics, such as erosion control, drainage, percolation, etc. Figures 4-I and 4-J show soils interpretation for residential development on septic tanks and on public sewer. Notice that most of the county has moderate to severe limitations for both types of development.

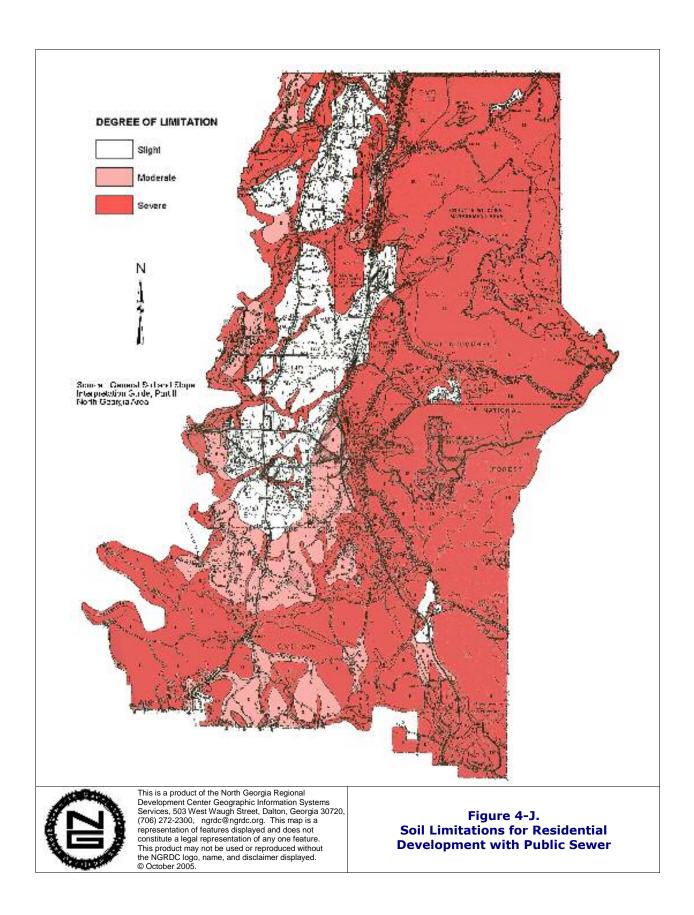
Soil surveys in Georgia are published in a regular series by the USDA Natural Resources Conservation Service. A modern soil survey for Murray County, with field mapping, has been completed, but has yet to be published.

Protection Measures

In 1975 the Georgia Erosion and Sedimentation Act was established to minimize the impacts of soil erosion upon the water quality of streams and other surface waters throughout the state. The Act requires than all land disturbing activities, including land clearing, dredging, grading, excavating, transporting, and filling, not be undertaken until a erosion and sedimentation control plan is completed and submitted to the proper authority.

The Environmental Protection Division (EPD) of the Department of Natural Resources is charged with administering the permit conditions and authorizes local governments to enforce these rules through locally adopted legislation. The Murray County Land Use and Development Office administers the requirements of Georgia Soil and Sedimentation Act.





4.1.9. Steep Slopes and Protected Mountains

Inventory

As illustrated in Figure 4-K, there are areas with steep slopes scattered throughout Murray County. The areas which meet the criteria for protected mountain are found in the eastern section of the county within the jurisdiction of the Chattahoochee National Forest. There are no steep slope or protected mountain areas in Chatsworth or Eton.

Resource Vulnerability

All of the terrain with 25% slopes at an elevation of 2,200 feet or greater falls within the jurisdiction of the Chattahoochee National Forest; however, some of the steeply sloped terrain under 2,200 feet in elevation is in private ownership. Much of this land offers scenic vistas and is therefore very desirable for home building.

Definitions

A steep slope is a slope with a rise to run ratio of 1 to 4 (25%) or greater.

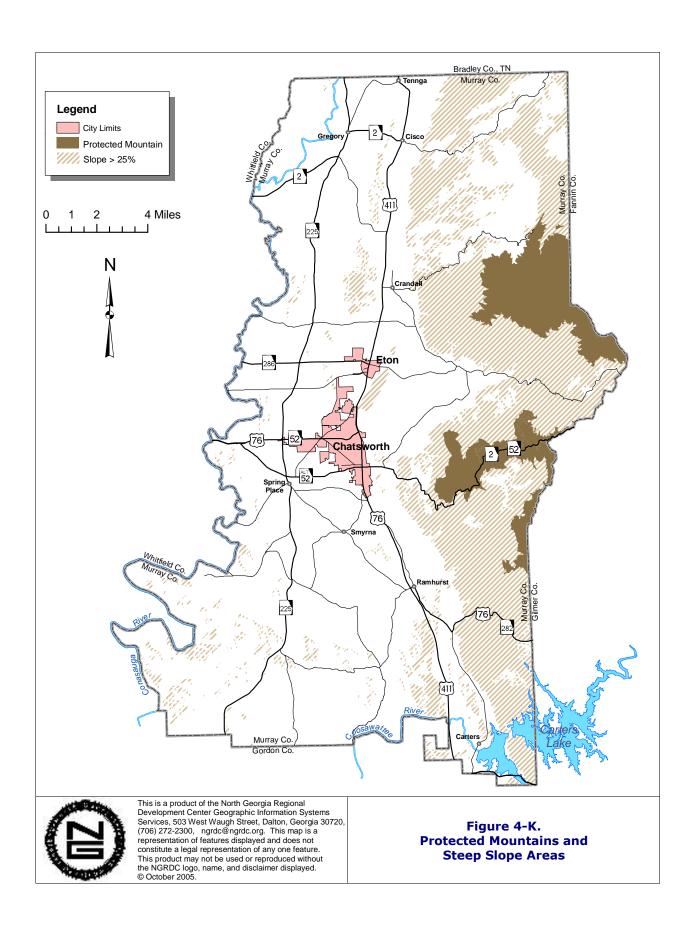
A protected mountain is defined under the Rules for Environmental Planning Criteria as all land area 2,200 feet or more above mean sea level that has a percentage slope of 25% or greater for at least 500 feet horizontally. It also includes crests, summits, and ridge tops which lie at elevations higher than any such area.

Soil destabilization due to poor grading of building sites has a detrimental impact upon vegetation and the water quality of small streams and lakes. Disturbance on mountain ridges can also destroy an area's aesthetic and scenic resources, which attract residents and tourists.

Existing Protection Measures

Murray County has adopted a soil erosion and sediment control ordinance which is administered and enforced with local personnel. This ordinance requires on-site sediment control measures to be put in place during development activity. These rules exempt both single family residential construction activity and timber harvesting activity. Furthermore, these rules do not limit the type or density of development in any given area.

Murray County also administers subdivision regulations. These regulations govern the development of streets, the division of land into lots, and the provision of water, drainage, and other improvements. While subdivision regulations do assure that adequate improvements are installed when development occurs, they do not regulate the type of development (height, structural characteristics, etc.) that occurs once an area is subdivided. In addition, while these existing regulations do afford some degree of protection from development activity, they do not adequately make provisions for such issues as tree preservation, preservation of scenic views, and other aesthetic considerations.



Inventory

To address those issues, the State of Georgia has developed protection measures contained in the State's Minimum Environmental Planning Criteria for steep sloped mountainous areas. These protection criteria are the minimum standards contained in the State's Mountain Protection Act and include the following:

- The Mountain Protection District comprises all land that is 2,200 feet or more above sea level, and has a slope of 25% or greater for at least 500 horizontal feet.
- 3 Land disturbing activities must meet requirements of the Erosion and Sedimentation Act of 1975.
- ③ Septic tanks must meet local requirements.
- 3 Wells must conform to the Well Standards Act of 1985.
- 3 Sewage treatment other than individual septic tanks must meet requirements of the Georgia Water Quality Control Act.
- 3 Public water supply must meet requirements of the Georgia Safe Drinking Water Act of 1977.
- Single family dwellings standing on a minimum lot of one acre, except for lots of record, are permitted.
- Multi-family dwellings are limited to four per acre in the absence of public water and sewer. Six dwellings per acre are permitted if public water and sewer are available.
- 3 No structure is to be more than 40 feet high, with certain exemptions.
- 3 Landscaping plans identifying trees over eight inches in diameter at four and a half feet above ground, and containing a replacement plan for any such trees removed must accompany building permit applications.
- No more than 50% of trees of greater than eight inches in diameter at four and a half feet above ground may be removed from the site in the course of land disturbing activities, except upon filing a reforestation plan developed by a registered forester.
 Handling and storage of hazardous materials is prohibited.
- 3 Roads must be constructed to minimize the danger of landslides and erosion.
- 3 Local ordinances detail information to be included on site plans and give the specifics of administration.

Murray County has not yet adopted these measures and the Department of Community Affairs has asked local governments to temporarily postpone adoption of these measures. The standards are not applicable to the Cities of Chatsworth and Eton as no steep slope areas exist within their limits.

Additional Recommended Protection Measures

Public education may be the most effective means of providing additional protection for steep slopes. BMP workshops for single family development could be conducted to help homeowners, builders, and others learn about how to protect steep slope areas and prevent or minimize erosion.

4.1.10. Farms and Farmland

Inventory

According to the 2002 Census of Agriculture, there were 41,834 acres of land in farm use in 2002. This equates to approximately 19% of the total land area in the county. As shown in Table 4-D on the following page, approximately 15,342 acres were in cropland, 10,416 were in woodland, and the remainder used for other purposes.

Figure 4-L illustrates areas in Murray County with soils with moderate to severe limitations for agriculture.

The market value of crop-related agricultural products sold was \$1,369,000 in 1997 and \$1,565,000 in 2002.

The market value of livestock-related products was \$42,335,000 in 1997 and \$25,521,000 in 2002.



Resource Vulnerability

Agriculture obviously contributes to the county economically, but it also helps to preserve the community's traditional rural appearance. Of course, farming within environmentally sensitive areas can produce chemical pollutants which have more negative impacts on water quality than other types of development might have. Therefore, as development in rural areas occurs, land use policies and controls should promote the continuance of farming where environmentally appropriate and compatible with future land use goals.

Due to tremendous growth in North Georgia, the value of agricultural land will become increasingly inflated with respect to residential development demand, resulting in a continual loss of agricultural property and open space. Because much of the prime farmland is located in low, buildable areas along major transportation routes, it is especially vulnerable to loss.

Possible Protection Measures

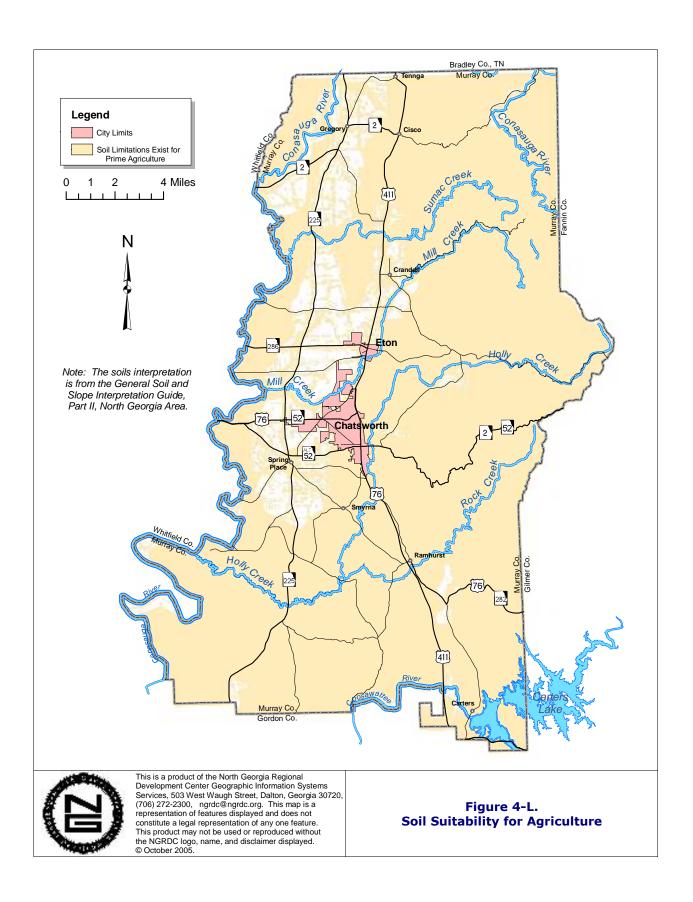
Other preservation techniques include (1) open space zoning, which enables farmers to cluster development on marginally productive uplands, or (2) the dedication of conservation easements, which would restrict land to agricultural activities while providing property tax relief. Tax assessment adjustments may also be used in conjunction with open space zoning to relieve development pressures that encourage farmers to sell their properties.

Inventory

Table 4-C. Farms and Farmland in Murray County

	1974	1978	1982	1987	1992	1997	2002	Average Annual Change
Number of Farms	362	283	310	240	216	297	306	-2
Land in farms (acres)	55,377	43,338	39,488	33,723	32,950	36,061	41,834	-484
Percentage of Land Area in Farms	24.9%	19.5%	17.8%	15.2%	14.8%	16.2%	18.8%	-0.2%
Average Farm Size (acres)	153	153	127	141	153	121	137	
Cropland (acres)	21,843	21,843	20,350	17,268	15,959	20,392	15,342	-232
Harvested	12,536	10,949	12,299	9,538	7,780	10,361	9,022	
Pasture or Grazing	7,867	8,850	6,491	5,072	6,591	8,983	5,038	
Other	1,440	1,346	1,560	2,661	1,588	1,048	1,282	
Woodlands (acres)	27,717	17,853	13,124	10,054	10,899	10,176	10,416	-618
Pasture or Grazing	n/a	2,222	2,301	2,600	2,326	1,301	1,582	
Not Pastured	n/a	15,631	10,823	7,454	8,573	8,875	8,834	
Other (acres)	6,519	3,619	3,014	6,401	6,092	4,552	16,076	+341
Market Value of Agricultural Products Sold (\$1,000)								
Crops	856	1,303	963	781	1,209	1,369	1,565	
Livestock, Poultry, and Livestock/Poultry Products	8,193	10,347	7,377	8,506	8,891	42,335	25,521	

Source: US Census of Agriculture



4.1.11. Forest Land

Inventory

Forestry is an economically valuable natural resource in Murray County. As shown in Table 4-E, 149,900 acres of the total land area in Murray County was forested in 1997. This represents a five percent decrease from 1972. Current ownership includes federal and state agencies as well as individual and corporate groups, both industrial and non-industrial. Land which was primarily in forest use in 2004 is shown on the existing land use map in Element 6.

Table 4-D. Forest Acreage in Murray County by Ownership

	1972	1983	1989	1997	_	1972 to 997	Average Annual
					net	%	Change
Total Acreage	157,300	148,803	156,942	149,900	-7,400	-5%	-296
Federal	51,000	47,016	45,776	47,200	-3,800	-7%	-152
State, City, County	100	54	10,114	7,800	7,700	7700%	308
Forest Industry	19,900	0,550	23,504	21,800	1,900	10%	76
Non-Industrial Private							
- Corporate		91	6,462				
- Individual (including farmer)	86,300	81,092	71,086	73,200	-13,100	-15%	-524

Source: Forest Statistics for North Georgia 1972, 1983, 1989, and 1997, USDA; www.srs.fs.usda.gov/pubs/rb/rb_srs036.pdf

The volume of both saw timber and growing stock grew between 1989 and 1997 in Murray County. Saw timber saw a 35% increase in the number of board feet and growing stock increased by 23% as shown in Table 4-F below.

Table 4-E. Volume of Saw Timber and Growing Stock in Murray County

		Saw Timber (thousand board feet)			Growing Stock (thousand cubic feet)			
	Total	Pine & Softwood	Soft Hardwood	Hard Hardwood	Total	Pine & Softwood	Soft Hardwood	Hard Hardwood
1989	658,767	328,281	42,796	287,690	240,977	107,371	24,974	108,632
1997	886,100	430,400	45,900	409,900	297,100	139,800	31,800	125,500
Net Change	227,333	102,119	3,104	122,210	56,123	32,429	6,826	16,868
% Change	35%	31%	7%	42%	23%	30%	27%	16%

Source: Forest Statistics for North Georgia 1989 and 1997, USDA; www.srs.fs.usda.gov/pubs/rb/rb_srs036.pdf

In recent years, Bowater has sold much of their timber holdings in north Georgia, including Murray County, to a land investment unit of Wachovia. Most of the former Bowater property in Murray County is still being managed for timber. Long-term development plans for the land are unknown at this point, but throughout the southeast, particularly in areas of high growth where land values are climbing, timber lands are being harvested and are then redeveloped with residential and commercial uses.

Existing Protection Measures

Timber harvesting in the Chattahoochee National Forest is regulated under the policies and procedures of the National Forest Service Environment Impact Statement (EIS) which includes Best Management Practices guidelines. Aside from the enforcement of Soil Erosion and Sedimentation Control measures, Murray County has very little impact upon commercial forestry on private property.

4.1.12. Plant and Animal Habitats

Definition

The plants and animals in this section were identified for Murray County using the Department of Natural Resources' (DNR) Freshwater and Wildlife Inventory Program, pursuant to the Georgia Wildlife Preservation Act of 1973 and the Federal Endangered Species Act of 1973. "Protected species" means those species of plant and animal life which the DNR has designated and made subject to the protection under these acts. The degree of protected status is described as follows:

Endangered species - any resident species which is in danger of extinction throughout all or a significant portion of its range.

Threatened species - any resident species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Rare species (state only) - any resident species which, although not presently endangered or threatened as previously defined, should be protected because of its scarcity.

Unusual species (state only) - any resident species which has special or unique features and because of these features deserves special consideration in its continued survival.

Inventory

Rare Plants. Table 4-G lists the rare and protected plants which are known to exist in Murray County.

Table 4-F. Rare and Protected Plants

Common Name	Latin Name	Federal Status	State Status
Georgia Aster	Aster georgianus	candidate	not listed
Purple Sedge	Carex purpurifera	not listed	threatened
Small-flowered Yellow Ladyslipper	Cypripedium parviflorum var. parviflorum	not listed	unusual
Goldenseal	Hydrastis canadensis	not listed	endangered
Cumberland Rose Gentian	Sabatia capitata	not listed	rare
Large-flowered Skullcap	Scutellaria montana	threatened	threatened
Northern Starflower	Trientalis borealis	not listed	endangered
Eastern Turkeybeard	Xerophyllum asphodeloides	not listed	rare

Sources: "Protected Plants of Georgia," Georgia Department of Natural Resources and georgiawildlife.dnr.state.ga.us

Rare Animals. Common mammalian species in Murray County include rabbits, squirrels, deer, raccoon, opossum, muskrat, beaver, mink, fox, bat, and an occasional bear. The coyote population has increased in Murray County to the point where they are a problem for farmers. They kill livestock and are also a threat to small outdoor pets.

Small game species can adapt more easily to habitat encroachment than larger animals such as deer. Deer range in a variety of habitats, even heavily urbanized areas, but specific habitat is required for escapes, fawning areas, and winter food supply. Doves, quail, and waterfowl are the primary game birds in the area. Other birds include hawks, owls, crows, and a wide variety of song birds.

Table 4-H lists rare and protected animals which are known to exist in Murray County or whose range includes Murray County.

Table 4-G. Rare and Protected Animals

Common Name	Latin Name	Federal Status	State Status
Mammals			
Rafinesque's Big-eared Bat	Corynorhinus rafinesquii	not listed	rare
Birds			
Bald Eagle	Haliaeetus leucocephalus	PS: LT, PDL	endangered
Reptiles			
Map Turtle	Graptemys geographica	not listed	rare
Alabama Map Turtle	Graptemys pulchra	not listed	rare
Invertebrates			
Fine-lined Pocketbook	Lampsilis altilis	threatened	threatened
Alabama Moccasinshell	Medionidus acutissimus	threatened	threatened
Coosa Moccasinshell	Medionidus parvulus	endangered	endangered
Gulf Moccasinshell	Medionidus penicillatus	endangered	endangered
Southern Clubshell	Pleurobema decisum	endangered	endangered
Southern Pigtoe	Pleurobema georgianum	endangered	endangered
Georgia Pigtoe	Pleurobema hanleyianum	candidate	not listed
Triangular Kidneyshell	Ptychobranchus greenii	endangered	endangered
Fishes			
Blue Shiner	Cyprinella caerulea	threatened	endangered
Holiday Darter	Etheostoma brevirostrum	not listed	threatened
Coldwater Darter	Etheostoma ditrema	not listed	threatened
Trispot Darter	Etheostoma trisella	not listed	threatened
River Redhorse	Moxostoma carinatum	not listed	rare
Frecklebelly Madtom	Noturus munitus	not listed	endangered
Amber Darter	Percina antesella	endangered	endangered
Goldline Darter	Percina aurolineata	threatened	threatened
Conasauga Logperch	Percina jenkinsi	endangered	endangered
Freckled Darter	Percina lenticula	not listed	endangered
Muscadine Darter	Percina sp. cf. macrocephela	not listed	rare

Sources: "Protected Animals of Georgia," Georgia Department of Natural Resources, georgiawildlife.dnr.state.ga.us, and updated by National Forest Wildlife Biologist

Trout Streams. Murray County contains numerous trout streams which are designated under the Georgia Erosion and Sedimentation Act as Trout Stream Protection Areas. These streams are illustrated in Figure 4-M. Trout streams are identified as either being open for year-round fishing, seasonal fishing, or fishing with special regulations.

The Georgia DNR Wildlife Resources Division and the US Fish and Wildlife Service stock streams with rainbow, brown, and brook trout from early April through mid-September. Streams on public land are stocked more often and with greater numbers of trout. More information on trout fishing in Murray County and throughout Georgia can be found at www.georgiaoutdoors.com.

Resource Vulnerability

Increasing development in Murray County and throughout North Georgia will impact both local and regional ecosystems as natural habitats are gradually diminished.

Existing Protection Measures

The USDA Forest Service has adopted management protection strategies relative to the needs of each of the species listed. The Georgia DNR is directly involved in the protection of these species as it administers rules pursuant to the Georgia Wildflower Preservation and Endangered Species Acts, adopted in 1973. In addition, much of the land in Murray County is contained in the Chattahoochee National Forest. Consequently, unique plant and animal species and habitats occurring in those areas receive some protection by virtue of that designation.

Trout streams in the North Georgia Appalachian Uplands are considered especially vulnerable due to the effects of soil erosion and pollutant discharge from forestry and agricultural practices. Consequently, under the scope of the Georgia Erosion and Sedimentation Act, the DNR has adopted development criteria which prohibits land disturbing activities within 100 feet of all designated trout streams. The enforcement of this requirement in Murray County is through the Land Use and Development Office.

Additional Recommended Protection Measures

Other measures for protecting trout streams are discussed under Section 4.1.2. "Water Supply Watersheds" and 4.1.5. "Protected Rivers."

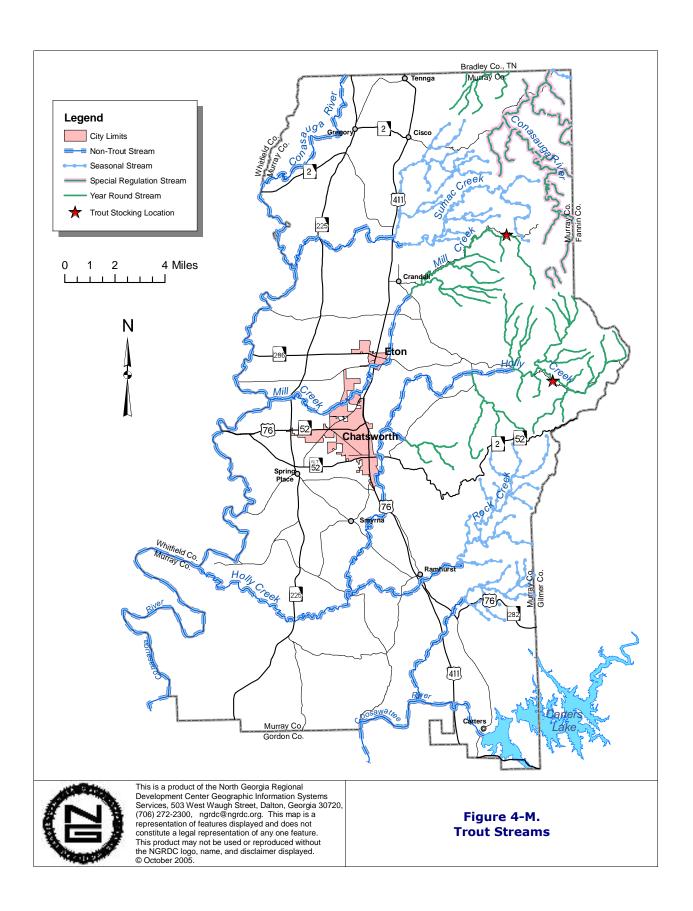
Conasauga River Aquatic Species Report

Source: The Armuchee/Cohutta Ranger District of the Chattahoochee-Oconee National Forest

The Conasauga is the prime jewel in the crown of the unique upper Coosa River basin in Alabama, Georgia, and Tennessee. No other aquatic region of North America has a higher percentage of endemic (native and restricted distribution) species – 30 species of fishes, mussels, snails, and crayfishes call the streams within this system – and nowhere else – home

The Conasauga ranks 4th nationally for the number of federally threatened and endangered species found in a single watershed. Although dozens of mussel species and several fishes have disappeared from its waters since the 1900s, at least ten federally listed species still occur in the river. Three of them are fishes: the endangered amber darter, the Conasauga logperch, and the threatened blue shiner. Seven are mussels: the endangered Coosa moccasinshell, Alabama moccasinshell, southern clubshell, southern pigtoe, and triangular kidneyshell; the threatened finelined pocketbook; and the extremely rare but unlisted Georgia pigtoe. In addition, about a dozen more rare species inhabit its waters. The river provides "designated critical habitat" for the above species, according to the US Fish and Wildlife Service.

Holly Creek, a Conasauga River tributary, also plays a unique role in aquatic species conservation. It ranks #2 in the state of Georgia for federally listed aquatics species, just behind the Conasauga. Five of the above species occur within a few river miles. A portion of Holly Creek has also been designated as "critical habitat" for listed fish and mussels.



4.1.13. Major Park, Recreation, and Conservation Areas

Inventory

Chattahoochee National Forest. The Chattahoochee National Forest covers 749,690 acres in North Georgia. Approximately 51,400 acres are in Murray County, which is roughly 23% of total land area in the county. (See Figure 4-N.) National Forest lands within Murray County fall in the Cohutta Ranger District and are under direct supervision of the Forest Supervisor's Office in Gainesville. A large portion of the Chattahoochee National Forest is managed as a multi-use resource in compliance with the Multiple-Use Sustained Yield Act of 1960. Uses include timber production, preservation, general recreation, and other public use. The US Forest Service has conducted an Environmental Impact Statement in conjunction with its Land and Management Plan for the Chattahoochee Forest. This document was adopted in 2004 and covers general resource policies for the next 10 years and specific management strategies for select areas, including wildlife protection, timber management practices, recreation improvements, land acquisition, roads, and other facility improvements.



Peeples Lake Road in the Chattahoochee National Forest.

According to the USDA Forest Service Fact Sheets, in North Georgia, the Chattahoochee National Forest provides 25% of the timber volume for local mills, with some mills depending on National Forest timber for 90% of their volume. Approximately 63% of the Chattahoochee-Oconee Forest is classified as suitable for timber production. (Source: www.fs.fed.us/conf/facts1/htm)

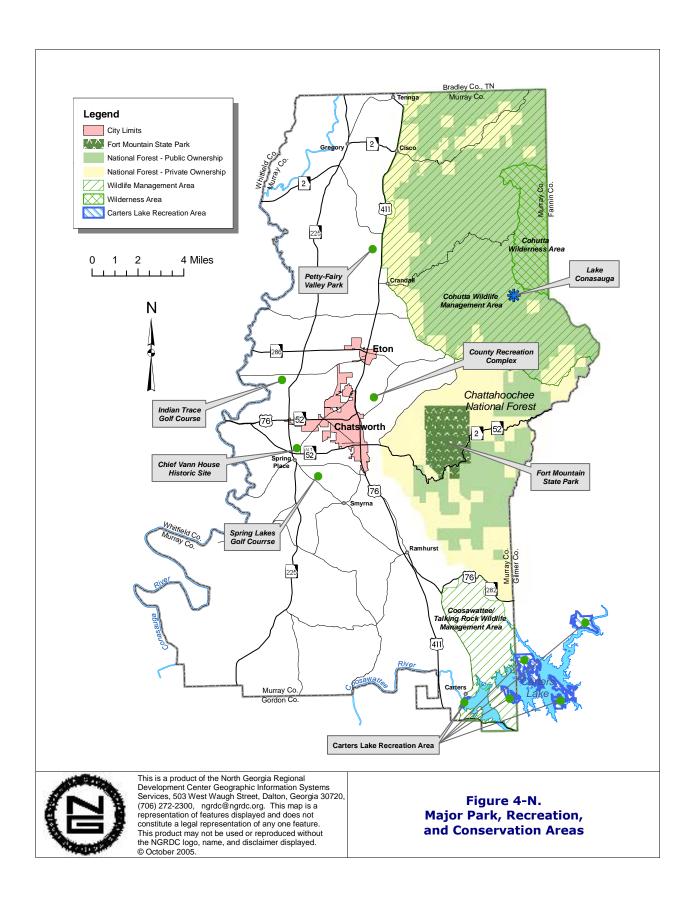
Federal Wilderness Areas. Within the Chattahoochee National Forest there is one wilderness area in Murray County: the Cohutta. It is managed by the USDA Forest Service and was established under the authority of the Eastern Wilderness Act for wilderness preservation, public recreation, and controlled hunting. Lands under the wilderness designation are protected from many development activities permitted on other National Forest lands.

The Cohutta Wilderness Area consists of approximately 35,268 acres and spans Murray, Fannin, and Gilmer Counties in Georgia. An additional 1,709 acres are in Tennessee. It is the largest federally designated wilderness area in the National Forest System in the Southeast. (Source: www.fs.fed.us/conf/facts1/htm)

State Wildlife Management Areas. The Georgia DNR administers two Wildlife Management Areas (WMA) in Murray County: Coosawattee/Talking Rock and Cohutta. The DNR maintains contractual agreements with the land owners making the land available for public use as a game reserve for hunting and general recreational use, such as hiking and primitive camping. The agreements are renewed on an annual basis.

Until recently, the Coosawattee/Talking Rock WMA, was owned primarily by Bowater Timber Company and the US Army Corps of Engineers. In May 2003, Bowater sold their holdings in the WMA, all of which were in Murray County, to Wachovia. Wachovia has not disclosed its plans for the property, but it is likely that it will be developed for residential or other uses. The Corps of Engineers tract of the Coosawattee WMA consists of approximately 6,060 acres of land in Gilmer and Murray Counties.

The Cohutta WMA, located in the northeast corner of the county, is predominantly on National Forest lands. The Cohutta WMA exists under a joint agreement between state and federal agencies.



Fort Mountain State Park. Fort Mountain derives its name from a 855 foot long rock wall which stands on the highest point of the mountain. The park is managed by the Parks, Recreation, and Historic Sites Division of the Georgia DNR and is located in the Chattahoochee National Forest off of GA Highway 2/52. The park is approximately 3,712 acres in size and contains a 17 acre lake. It includes hiking, backpacking, and mountain biking trails, fishing, pedal boat rental, miniature golf, swimming, picnicking, and camping (both cottages and campsites).

Lake Conasauga Recreation Area. Located near the summit of Grassy Mountain, Conasauga Lake is the highest lake in Georgia. It is owned by the US Forest Service and is managed by the Cohutta Ranger District Office. The lake is 19 acres in size and the recreation area includes a boat ramp, picnic tables, restrooms, and camping areas.

Carters Lake. The Corps of Engineers tract of the Coosawattee Wildlife Management Area surrounding Carters Lake consists of over 3,000 acres of land in Murray County. Carters Lake also has eight day-use areas which offer a variety of recreation facilities including boat ramps, playgrounds, picnicking areas, a public beach, camp sites, and hiking and mountain biking trails.

Spring Lakes Golf Club. This 18-hole public golf course is located on Spring Place/Smyrna Road. It opened in 1974.



The trail leading to the stone tower in Fort Mountain State Park.

Indian Trace Golf Course. Located on Mitchell Bridge Road, this 18-hole course is open to the public. It is operated by Indian Trace, Inc. and has been open since 1990.

Chief Vann House Historic Site. The Chief Vann House State Historic Site is located at the intersection of GA 225 and GA Alternate 52. The site which is open to the public is 23 acres. Approximately 100 additional acres were recently acquired through a public/private initiative.

Holly Creek Initiatives. Holly Creek is a tributary to the Conasauga River, a river which is considered globally significant to the conservation of freshwater diversity. Several efforts have been made in recent years to protect the forested buffer of Holly Creek. The locations of these initiatives are shown in Figure 4-O to the right and are described briefly below.

The Nature Conservancy has been at the forefront of efforts to purchase property along Holly Creek. Through a Recovery Land Acquisition Grant, they acquired the 250± acre Patterson Tract in 2004. In April 2005, the Nature Conservancy announced that it purchased the 350± acre Thrower Tract. Both properties will

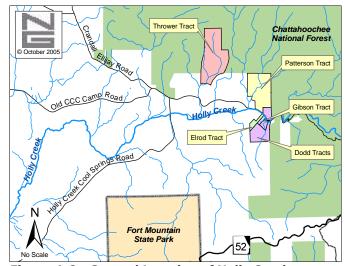


Figure 4-O. General Location of Holly Creek Initiatives

be transferred to the US Forest Service for inclusion in the Chattahoochee National Forest. Prior to these two purchases, the Gibson, Elrod, and Dodd Tracts, each along Holly Creek, were protected through similar measures.

The purchase of these tracts will contribute to a larger effort to enhance water quality and protection of the Conasauga River watershed. The properties include important riparian buffers in the headwaters of the watershed and will enhance water quality by guarding against increased siltation.

County Parks. The location of the County Recreation Complex and Petty-Fairy Valley Park are shown in Figure 4-N. They area described in Section 5.1.8.

Resource Vulnerability

Wildlife Management Areas under temporary contractual arrangements are never as effective as land preserved under public ownership. The Department of Natural Resource expects to lose much of the privately owned WMA acreage in North Georgia to development or alternative land uses, in the absence of any specific local strategy for maintaining and promoting WMAs.

Existing Protection Measures

WMAs provide an important habitat for breeding, hiding, and foraging for many of the regional animal species. However, because lease agreements are subject to cancellation, reserves on private lands cannot be classified as a permanent protective wildlife habitat. In addition, although there are substantial property tax reductions available to participating private and corporate land owners, the benefits are offset by the loss of other economic uses. Thus, the security of the habitat in private lands will be largely decided by the demand for commercial use or other development demands. The Chattahoochee-Oconee Land and Resource Management Plan (January 2004) governs the future of the Coosawattee/Talking Rock and Cohutta WMAs.

Additional Recommended Protection Measures

Public/private initiatives, such as those involving Holly Creek, appear to be the most effective means of permanently protecting valuable lands and such efforts should be continued.

4.1.14. Scenic Views and Sites

Exceptional views of all types exist in Murray County and range from broad, panoramic mountain vistas to site specific views. Site specific views tend to occur along rivers and creeks and in the small valley areas. Long, narrow valleys also form attractive views.

Resource Vulnerability

The greatest threat to the preservation of natural scenic views is the extensive amount of development currently taking place in Murray County and throughout North Georgia.

Existing Protection Measures

The protection, conservation, and enhancement of scenic resources requires attention on many fronts. These include publicizing and promoting the value of scenic and natural resources. This can be achieved by designation of scenic byways and highways. Scenic byways are specially designated highway routes offering travelers access to both beautiful scenery and the cultural features of a particular



View Along Old CCC Camp Road

area. Official designation of scenic byways/highways brings attention to the resource and begins a process to educate local governments on the importance of managing development within scenic corridors.

Scenic Highways. Currently, there is one designated scenic highway located in Murray County: the Southern Highroads Scenic Highway illustrated below. It was designated in 1996 by the Georgia Legislature. (See Figure 4-P.)

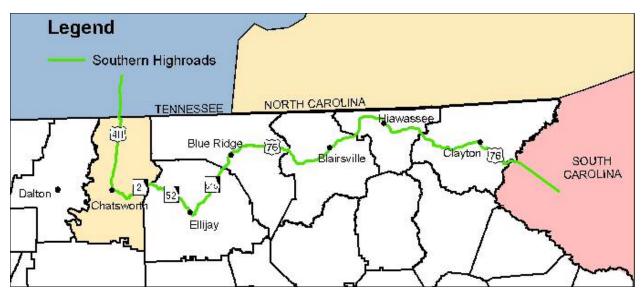


Figure 4-P. The Southern Highroads Scenic Highway.

The Southern Highroads Development Association is an organization whose membership consists of local governments; USDA Forest Service; Tennessee Valley Authority; Appalachian Regional Commission; Chambers of Commerce; Georgia, Tennessee, North Carolina, and South Carolina Departments of Transportation; the North Georgia Regional Development Center; and others. Its mission is to create scenic view awareness, promote these views as tourist attractions, and educate citizens and local officials on the value of preserving unique views. Official designation and recognition of the Southern Highroads Scenic Highway is its greatest achievement. Efforts are also underway to work with local governments by educating them on the tools available for scenic view protections. More information on the Southern Highroads Scenic Highway can be found at: www.SouthernHighroads.org.

Scenic Byways. In Georgia, a scenic byway (as opposed to a scenic highway) is a road that has been designated as such by the Board of the Georgia DOT and has been approved through the Georgia Scenic Byways Program. This is a well-defined designation process which includes an application, review by the Georgia DOT, and the development of a Corridor Management Plan. There are five

More information on the Georgia DOT Scenic Byways Program can be found at: www.dot.state.ga.us/dot/plan-prog/ lanning/projects/scenic_byways/indes.shtml.

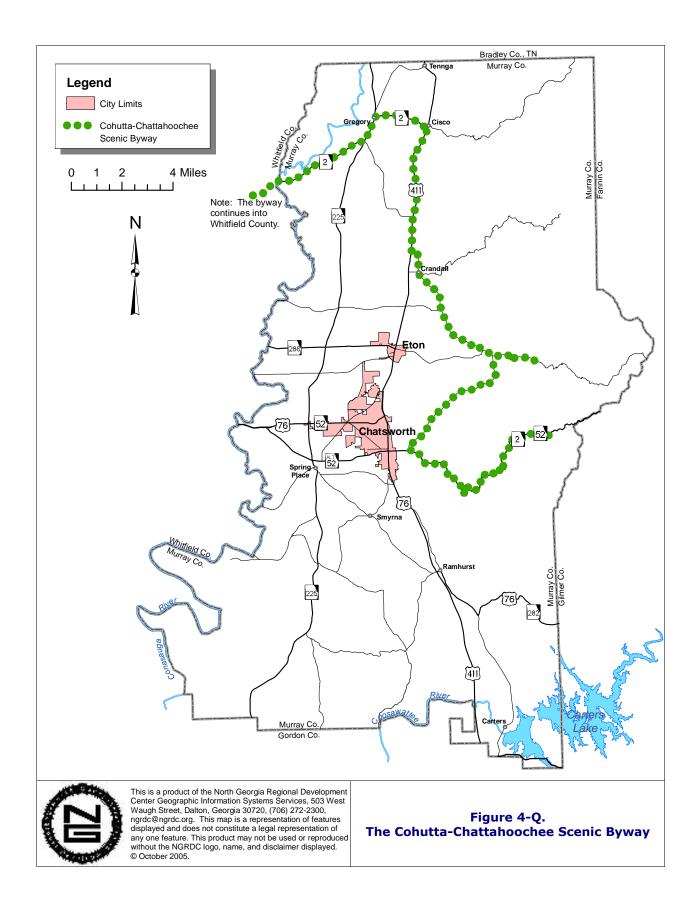
primary benefits to scenic byways designation: recognition, interpretation assistance, planning, promotion and marketing, and training and technical assistance.

There is one scenic byway in Murray County: the Chattahoochee-Cohutta Scenic Byway. (See Figure 4-Q.) Part of the byway is also located in Whitfield County. A Byway Steering Committee created the following vision for the byway: "To enhance, preserve, and raise the recognition of the mountain and rural beauty through local leadership that generates pride among the community." A Corridor Management Plan has been developed for the byway and design guidelines are in the process of being developed.

Additional Recommended Protection Measures

Development regulations can also play a role in preserving views during the development process by using techniques such as open space preservation concepts, tree preservation measures, controlling density of development, signage control, etc.

Conservation of scenic resources, including natural as well as the historic and cultural resources is important to Murray County not only because of their intrinsic value, but because they also generate economic benefits for the community. By protecting scenic resources, Murray County and the North Georgia region can preserve community character, enhance quality of life, and create the potential for increased economic development through tourism.



4.1.15. Governor's Greenspace Program

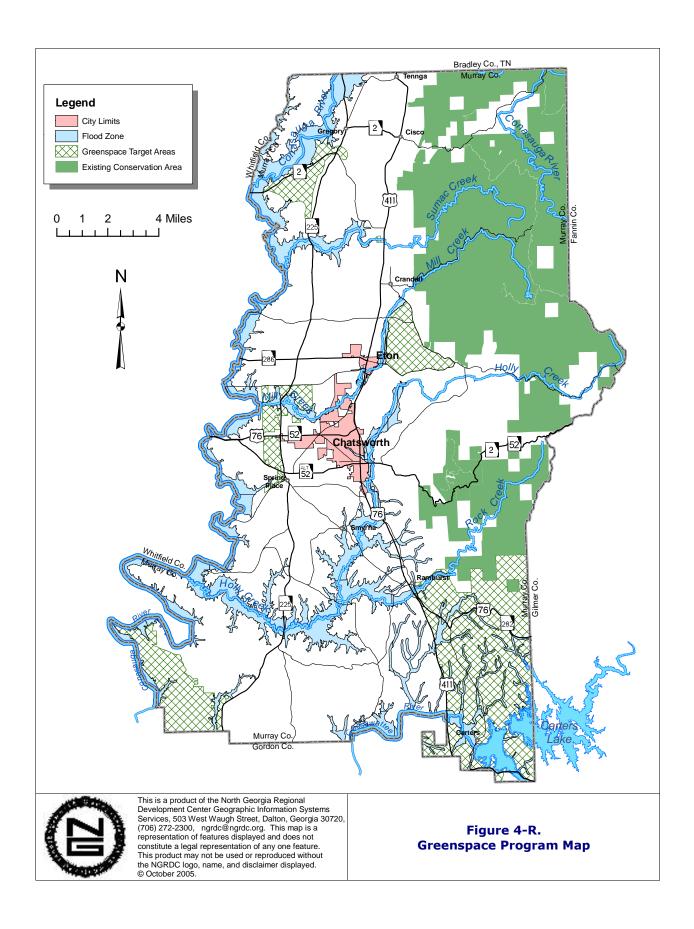
Murray County participates in the Governor's Greenspace Program. The Cities of Chatsworth and Eton have elected not to participate directly in the program, but to support Murray County's efforts in the program which will accomplish goals that will benefit both the County and Cities.

Murray County proposes to protect 4,423 acres of land. This is in addition to the 54,880 acres which are already in permanent greenspace. The land type, estimated acreage, and tools for protection which are proposed in the County's Greenspace Program are shown below in Table 4-H.

Table 4-H. Governor's Greenspace Program Proposal

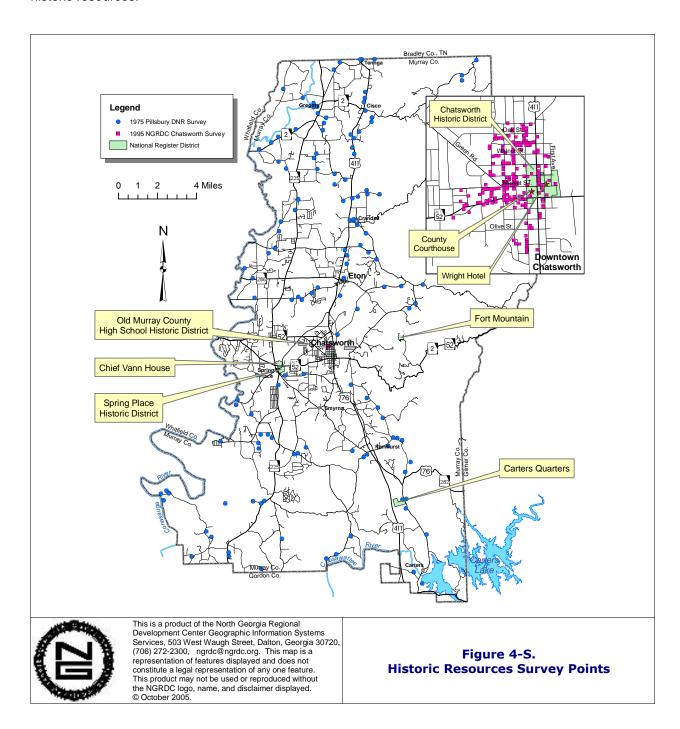
Land Type	Estimated	Tools for Protection	
	Acreage	Permanent	Temporary
Flood Plain	3,760	conservation easements restrictive covenants	Part V Minimum Environmental Standards
Archaeological Sites	44	fee simple acquisition conservation easements	archaeological/conservation overlay zones
Historic and Prime Farmland	442	conservation easements	historic preservation conservation overlay zones
Parkland	177	restrictive covenants conservation easements	

The estimated cost of protecting the acreage listed above is \$5,097,781. The Greenspace Program Vision Map is shown in Figure 4-R.



Part 2: Cultural Resources

Two historic resources surveys have been conducted in Murray County. The Department of Natural Resources conducted as survey of the entire county in 1975 and 1992/1993 and North Georgia Regional Development Center conducted a survey of downtown Chatsworth in 1995. The locations of the buildings which were surveyed are shown in Figure 4-S. As this figure illustrates, the County has an abundance of historic resources.



4.2.1. Residential Resources

Chief Vann House. The Chief Vann House, discussed in previous sections is probably the most notable historic residence in Murray County. It is a Federal-style, brick I-house featuring a cantilevered stairway and Cherokee-influenced carved wooden mantels. The house was built in 1805 by half-Cherokee James Vann, noted for his promotion of Indian education. The house was restored in 1958 and is owned by the Department of Natural Resources.

Carters Quarters. Carters Quarters, located on old Highway 411, is also listed on the National Register of Historic Places. It is a very early nineteenth century plantation plain house built by George Harlan in what was then Indian territory. Additions, where were made in the 1930s, were designed by Ivey and Crook of Atlanta.

Spring Place Historic District. The only historic district in Murray County which is residential in nature is the Spring Place National Register Historic District. The location of the district is shown in Figure 4-T.

While the establishment of a community at Spring Place dates to the beginning of the 19th century, the general



A Historical Photo of Carters Quarters

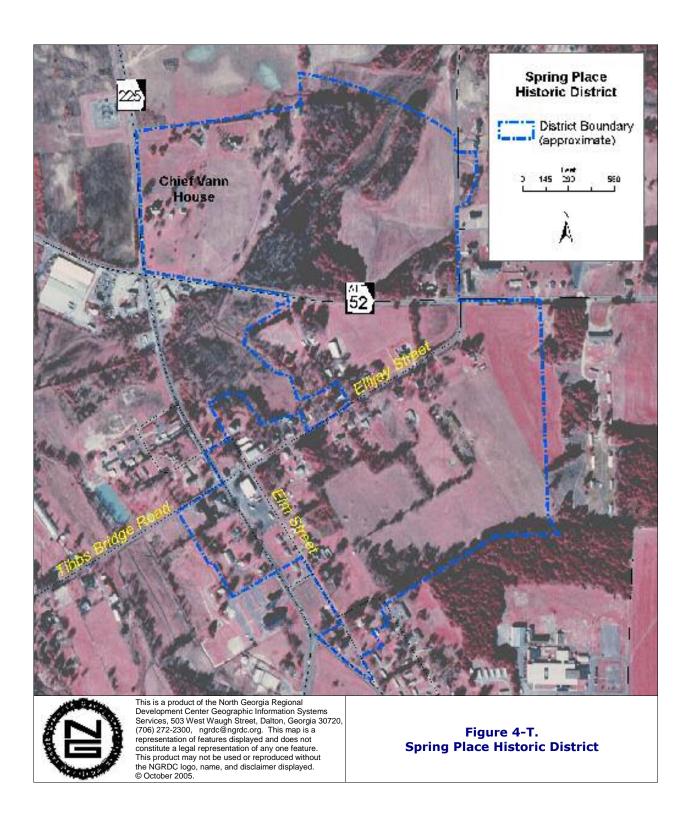
character of the Spring Place Historic District reflects a later period of development dating from the mid to latter part of that century. In many ways Spring Place's appearance is typical of numerous small Southern towns, featuring residential development that grew up around local agricultural interests and an active central business district. But while the building of the railroad spurred the growth and evolution of many small Georgia towns, Spring Place instead saw its development roots in the establishment of the Moravian Mission there as early as 1801 and in its proximity to the old Federal Road, a major thoroughfare opened for passage and trade around 1806.

Originally the county seat of Murray County, Spring Place had a handsome courthouse which stood at the center of the former city limits of the town at the intersection of Elm and Ellijay Street. The commercial district few up around the courthouse, with stores, offices, and other public establishments being constructed along Elm Street, GA 225, Ellijay Street, and along a street south of the courthouse which no longer exists. This commercial center was surrounded by residential development, which in turn was surrounded by agricultural fields and woodland.

Architecturally, the Spring Place Historic District has a late 19th century appearance, as most of the extant historic structures appear to date from between 1875 and 1900. It is also very rural in character, with large expanses of open field and wooded areas still comprising the outer portions of the former city limits.

The former site of the Lucy Hill Institute is also included in the historic district. The property now includes a small recreation area and the Mission/Lucy Hill Spring, one of the many springs in town.

The Spring Place Historic District holds enormous archaeological potential for at least three reasons. First it was the site of a Moravian Mission from 1801 to 1832. Chief James Vann invited the Missionaries to come to the area in 1801. Their mission was, among other things, to educate the Cherokees. That education included reading, grammar, writing, sacred history, mathematics, geography, weaving and botany. Second, Spring Place is in close proximity to the Old Federal Road, a major thoroughfare in the 1800s. Spring Place had one of the first post offices in the area and was also on the stagecoach route. Third, the town played a central role in one part of the history of the Cherokee Nation.



4.2.2. Commercial, Industrial, and Institutional Resources

Wright Hotel. The Wright Hotel, located on Market Street in Chatsworth, is the only commercial structure listed individually on the National Register of Historic Places. The hotel was built in 1909 and was advertised as a summer spa. The property is owned by the Whitfield-Murray Historical Society.

Murray County Courthouse. This Neoclassical revival courthouse was erected in 1916 and is one of only three domed courthouses in the State of Georgia. It is listed on the National Register of Historic Places as part of a statewide nomination.



The Wright Hotel

Chatsworth Historic District. The boundaries of the Chatsworth National Register Historic District are shown below in Figure 4-U.

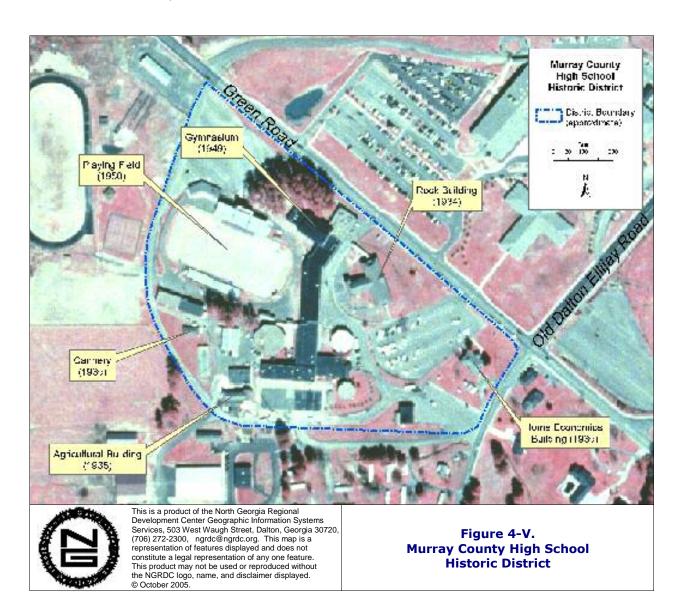


Murray County High School Historic District. The boundaries of this district are shown below in Figure 4-V. The four oldest buildings on the campus feature stone exteriors and exhibit features of different architectural styles including Spanish Colonial Revival and Craftsman. In addition to the architectural significance of these buildings, the historic district is also significant in the areas of agriculture and education because of the role the schools played in initiating an agricultural education program in the Murray County. Not only was an agriculture building constructed, but the campus also



The "Rock Building" in the Murray County High School Historic District.

included a cannery which was used by both high school students and Murray County residents. Through the mid-1950s, the campus included more than one hundred acres of farmed land.



4.2.3. Transportation Resources

Old Federal Road. As discussed previously, The Old Federal Road was the primary transportation route through the region in the 1800s. It served as both a postal route and a stagecoach route. The Old Federal Road began west of Athens, Georgia and entered Murray County near Carters. It followed what is now Old US 411, with a western fork leading from Ramhurst to Spring Place and then through Whitfield County. The eastern fork ran throughout Murray County and parts are still in use and call Old Federal Road. Because of the historical significance of the road, the Georgia DOT is in the process of determining its path and marking it.

4.2.4. Rural Resources

Crossroad Communities

There are numerous crossroad communities in Murray County. These include Tennga, Gregory, Cisco, Crandall, Spring Place, Ramhurst, and Carters. The locations of these communities are shown on maps throughout this plan.

Equestrian Facilities

Murray Saddle Club. The Saddle Club is located on Highway 52, just east of downtown Chatsworth. It is the host of a wide variety of equestrian events including the Georgia State And Red Carpet Championship Mule-Draft Horse Frolic Show, the Georgia Spotted Saddle Horse Association State Championship, and the National Rocking Horse Association's World Championship. The saddle club was organized in 1957 and chartered in 1959. It moved to its current site in 1975.

Bouckaert Farm. Located in southern Murray County, Bouckaert Farm has been the site of the Chatsworth International Horse Trials since 1988. Bouckaert Farm is one of the premier equestrian facilities in the world, offering a wide range of opportunities for the equestrian enthusiast. In 2005, Bouckaert Farm hosted its first FEI (International Equestrian Federation) World Cup qualifier event.

4.2.5. Other Historic, Archaeological, and Cultural Resources

Community Landmarks

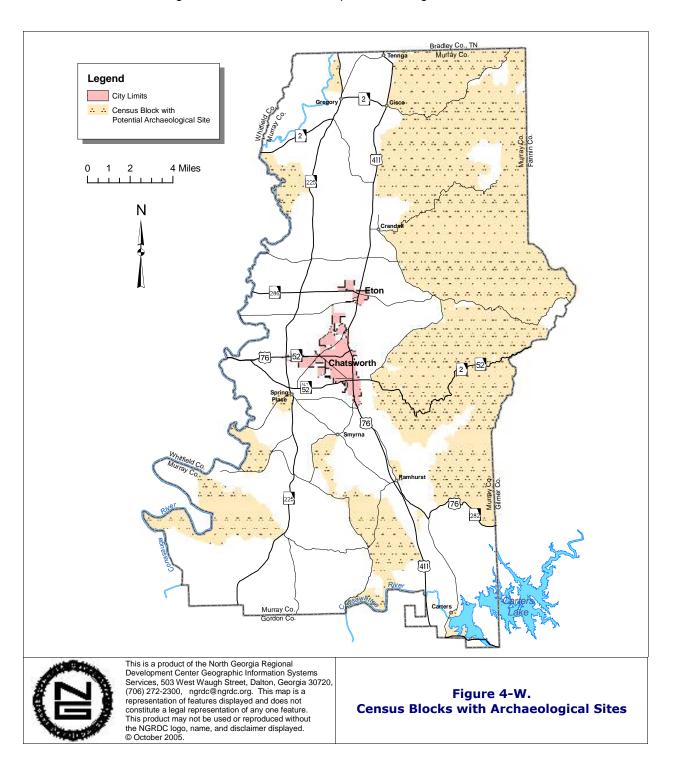
In addition to the properties listed in Sections 4.2.1. to 4.2.4., the following are considered community landmarks:

- 3 The Old L&N Depot
- 3 The Public Well in Eton
- 3 God's Acre
- The Section House at Chatsworth City Park
- ③ Spring Place Cemetery
- 3 Dennis Mill
- ③ Gregory Mill
- 3 Cohutta Springs

- 3 Sumach Cumberland Presbyterian Church
- 3 Cisco School
- 3 Old Goswick Farm and Store
- 3 Clint Bryant House
- 3 Culvard House
- 3 Old Franklin Crossroad (GA 286/GA 225)
- ③ Old Spring Place Methodist Church

Archaeological Sites

The Georgia Department of Community Affairs "Planbuilder Mapviews" was used to map census blocks where known archaeological sites exist. The census blocks are shown in Figure 4-W. The specific locations of the archaeological sites are not shown to prevent looting or vandalism of the resources.



Cherokee Removal Forts

Between 1836 and 1838, a number of military posts were constructed in Georgia in conjunction with Cherokee Removal programs. According to "Cherokee Removal: Forts Along the Georgia Trail of Tears," published by the National Parks Service, these posts were not intended for housing captive Indians, but for providing shelter for troops and supplies. There were two such posts in Murray County: Fort Hoskins and Fort Gilmer. (The discussion provided below is from the National Parks Service report.)

Fort Hoskins. The exact location of this fort has not been determined, but it was located near Spring Place. The post was not occupied in winter months so it is likely that personnel stationed there slept in tents rather than barracks. It is possible that Fort Hoskins served as the center for hospital supplies.

Fort Gilmer. In the 1950s, the Georgia Historical Commission erected a state marker near the likely site of Fort Gilmer. The fort was located along the Federal Road near the Cherokee town of Coosawattee.

Battlegrounds

Although several Civil War skirmishes occurred in Murray County, there are no known battleground sites in the county.

Tabby Ruins

There are no tabby ruins in Murray County.

Gardens

There are no public gardens in Murray County.

Parks

Petty-Fairy Valley Recreation Park. Murray County opened this park in 2001. Located off US 411 North, this park includes baseball fields, soccer/football fields, a walking track, and playground equipment.

Chatsworth City Park. This lovely park, located behind City Hall, opened in 1996. It includes swings, sidewalks, open lawns, and a fountain.

Spring Place Park. Nestled on a small site in Spring Place, this park is the location of the former Lucy Hill Institute and is owned by the Murray County Board of Education. It includes a picnic shelter constructed by the Ruritan Club and the Mission Spring, one of many springs in the town.

Eton City Park. This park is located on the site of the Old Eton Elementary School.

God's Acre. Located in Spring Place, this site contains the burial ground of Moravian Missionaries and several Cherokee Indians, including Principal Chief Charles R. Hicks. The property was donated to the Department of Natural Resources in 2002.

Views

Murray County abounds with scenic views. The most photographed is probably the view of Fort Mountain from the valley below.

Festival Locations and Gathering Places

Following is a list of events that occur in locations throughout Murray County:

- 3 Murray County Spring Festival
- 3 Appalachian Wagon Train
- 3 Tour de Georgia
- 3 Eton Country Fair
- ③ Vann House Days
- 3 Moravian Christmas at the Chief Vann House
- ③ Spring Place Community Festival



View of Fort Mountain from Chatsworth City Hall

Cemeteries and Burial Grounds

Murray County contains numerous cemeteries, many of which are on property adjacent to churches, although there are also numerous family cemeteries in the county. Some of the older cemeteries include the following:

- 3 Ball Ground Cemetery
- 3 Baxter Cemetery
- 3 Calvary Cemetery
- 3 Carters Cemetery
- ③ Casey Springs Cemetery
- ③ Center Valley Cemetery
- 3 Coffee Family Cemetery
- 3 Connally Family Cemetery
- ③ Davis Family Cemetery
- 3 Eton Cemetery
- 3 Fouts Family Cemetery
- ③ Free Hope Cemetery
- 3 Harris Family Cemetery
- 3 Harrison Chapel Cemetery
- 3 Hassler's Cemetery
- 3 Hemphill Family Cemetery
- 3 Hill Cemetery

- 3 Holly Creek Cemetery
- 3 Hopewell Church Cemetery
- 3 Jackson Family Cemetery
- 3 Liberty Cemetery
- 3 Loughridge Family Cemetery
- 3 Mathis Cemetery
- 3 McEntire/Montgomery Cemetery
- 3 Mt. Zion Cemetery
- 3 New Prospect Cemetery
- 3 Osborn Family (Center Hill) Cemetery
- ③ Spring Place Cemetery
- 3 Sumach Cemetery
- 3 Summerour Cemetery
- ③ Treadwell Cemetery
- ③ Venable Family Cemetery
- ③ Vining Family Cemetery
- 3 Williams Cemetery

4.3. Assessment of Current and Future Needs

In Section 4.1, an inventory of the natural and cultural resources in Murray County, Chatsworth, and Eton was provided. The following assessment considers whether or not existing policies and programs are adequate to wisely and responsibly utilize, develop, manage, and/or preserve valuable resources for the maximum long-range benefits to the community.

This assessment can be completed by answering the following questions which were taken derived from Section 110-12-1-.0 4(12)(d)2.(ii) of Georgia's Minimum Local Planning Standards.

Which of the community's natural and cultural resources are potentially vulnerable to land development and other human activities?

Which resources need the attention of the local government due to encroachment of human activities, unintended land use conflicts, physical disturbance, or rapid physical deterioration?

These questions are answered in Section 4.3.1. and 4.3.2.

4.3.1. Which of the community's natural and cultural resources are potentially vulnerable to land development and other human activities?

Murray County's natural and cultural resources are some if its greatest assets. Those resources which are vulnerable to either development, neglect, or vandalism include the following:

- ③ water supplies and watersheds;
- 3 rivers, trout streams, and creeks;
- 3 steep slopes and protected mountains;
- 3 farm land and forest land, and
- 3 historic structures and archaeological sites.

Throughout the general population, it seems that there is a general lack of awareness of and appreciation for the natural and cultural resources in the county. Until that situation changes, Murray County will continue to lose many of its most valuable assets.

4.3.2. Which resources need the attention of the local government due to encroachment of human activities, unintended land use conflicts, physical disturbance, or rapid physical deterioration?

All of the resources listed in Section 4.2.1. need the attention of the local governments. The most effective ways to protect the area's valuable resources will be through (1) the enforcement of existing regulations and (2) public education.

4.4. Community Goals and Implementation Program

To support and achieve the community's joint vision statement, Murray County and the Cities of Chatsworth and Eton have developed the following natural and cultural resources goal and associated policies and action items:

Goal: To conserve, protect, and wisely manage the area's environmental, natural, and historic resources

Policy 1: Environmental Protection.*

Air quality, water quality, and environmentally sensitive areas should be protected from negative impacts of development.

Environmentally sensitive areas deserve special protection, particularly when they are important for maintaining traditional character or quality of life of the community. Whenever possible, the natural terrain, drainage, and vegetation of an area should be preserved.

Policy 2: Regional Cooperation.*

Regional cooperation should be encouraged in setting priorities, identifying shared needs, and finding collaborative solutions, particularly where it is critical to the success of a venture, such as the protection of shared natural resources.

Policy 3: Heritage Preservation.

The traditional character of the community should be maintained through preserving and revitalizing historic areas, encouraging new development that is compatible with traditional features, and protecting other scenic and natural features that are important to defining the community's character.

Action Items:

- a. Adopt a steep slope ordinance.
- b. Investigate storm water management regulations.
- Pursue grant funding to remedy septic tank problems and implement farm BMPs.
- d. Ensure that new development is designed to minimize the amount of land consumed and that open space is set aside from development for use as buffers, parks, greenbelts, or wildlife corridors.

Action Items:

- a. Continue involvement in the Northwest Georgia Regional Water Resources Partnership.
- Support the efforts of the Conasauga River Alliance to both educate the public and protect natural resources.
- c. Promote the Scenic Byway and Scenic Highway.

Action Items:

- Adopt and implement functional design guidelines for the Cohutta-Chattahoochee Scenic Highway.
- b. Develop a National Register District nomination for Eton.
- c. Support National Register and Local Historic District nominations throughout the community.
- d. Create a Joint Historic Preservation Commission.
- e. Develop a master plan for Spring Place prior to the bypass being completed.
- f. Support efforts to expand the Vann House property and other public sites in the community.
- g. Support efforts to locate the site of Fort Hoskins and place a historical marker at the site.
- h. Increase public education related to cultural resources, possibly through a school program or through a series of articles in the newspaper.
- i. Transfer Murray County historic resource survey data to GIS based land use maps.
- j. Support efforts to renovate the train station, the old elementary school in Eton, the old Rock School, the Section House, the Wright Hotel, and other historic buildings in the community.

^{*} A DCA "Quality Communities" Objective